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Nursing-Midwifery students and teachers' views of effective factors in clinical education

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Abstract

Problem statement: Clinical education is a key component to learning in the health professions. Promoting clinical education in nursing and midwifery fields requires continuous assessment of the current situations in clinical education and identifying effective factors from views of nursing - midwifery students and their clinical teachers. **Purpose:** To determine Nursing - Midwifery students and teachers' views of effective factors in clinical education. **Methods:** This study was a descriptive cross-sectional study, that carried out on 338 nursing-midwifery students and 66 teachers in Guilan University of Medical Sciences in Iran who were selected by census sampling method. The data were gathered by a questionnaire consisted of two parts: teachers and students demographic data and specific questions about clinical education in four domains include: clinical teacher's characters, student's characters, clinical environment and educational curriculum. All of data were analyzed by SPSS 16. **Findings:** The mean age of teachers was $43 \pm 6/7$ yrs, and the mean age of students was $22.5 \pm 2/5$ years. The results showed that except clinical teacher's characters domain, there was significant difference between teachers and students attitude scores in three domains in clinical education. In deed students had positive attitude in three domains rather their teachers. **Conclusion:** With regard the importance of these four domains from views of students and teachers, it is recommended to administrators and program designer of clinical education, to consider these domains in clinical curriculum planning in order to promote clinical education.

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1. Background

Nursing and midwifery employ specific science and skills to advance patients' health and are among the most complicated fields in medicine (Nahas et al,1999). Clinical education is an essential part of nursing and midwifery (Niknam et al,2006).It offers students an opportunity to convert conceptual knowledge into intellectual and psychological skills and apply them in the dynamic of caring for patients (White &Ewan,1995).Clinical education comprises about half the training of nursing and midwifery students', all of whom must be competent to apply their learned skills when they graduate (Nahas et al,1999). Detecting significant issues in clinical education and addressing existing problems contribute to achieving educational objectives, training skilled nurses, and offering quality care (Shahbazi&Salimi,2000).Improperly planned and executed educational programs that cannot achieve established goals create irreparable damage and bear harmful social, economic, and cultural consequences for graduates, society, and universities' reputations(Sayari,1996).Teaching and learning are interdependent. Although

teaching is the instructor's activity, its result—learning—is related to the learner. Thus, efficacy of learning should be investigated in both student and instructor to improve educational quality (Salehi et al, 2003). This study examines instructors' and students' opinions about factors affecting clinical education. Greater and more detailed elucidation of those factors helps to establish valuable criteria for evaluating and planning clinical education.

2.2. Review of the literature

An earlier review study of clinical educational challenges identified seven problems: (1) students' undefined duties in different parts of the hospital, (2) insufficient understanding of society and patients of nursing, (3) interventions between theoretical learning and practical skills, (4) students' lack of autonomy in planning care, (5) lack of appropriate support by instructors to students, (6) conflict between the educational objectives of internship and hospital staffs' expectations of students, and (7) insufficient necessary facilities for students (Jokar & Haghani, 2011). In their review of clinical education and its results on students, Tanda & Denham (2009) found that proper use of skill labs, continuing clinical education, educational centers offering support to students, and appropriate and positive communication between clinical instructors and students are essential to clinical education (Tanda & Denham, 2009). Ziber and Hagen (2008) conducted a study, "Interpersonal Boundaries in Clinical Nursing Education," in which all participants said strict boundaries between student and instructor are necessary to prevent manipulation from both sides. However, the participants admitted that the exceptional and complicated nature of instructor-student relationships requires those boundaries to be flexible. Finally, they suggested that instructors must consult with their confidant colleagues in particular situations (Ziber & Hagen, 2009). However, most previous research discusses students' or instructors' educational views separately, and few studies compare both groups' opinions about clinical education. For that reason, we undertook this study to examine instructors and students' views about features of effective clinical education. Further and more detailed understanding of those features will help to create valuable criteria for evaluating educational services and planning clinical education.

3.3. Materials & Method

This study involves cross-sectional method research. Its population was 338 randomly selected clinical instructors and nursing and midwifery students from the Nursing & Midwifery School at Guilan University of Medical Sciences. To qualify for the study, instructors had to have at least two years of clinical teaching experience and students must have completed at least half of the period required to earn their bachelor's degree. Information was gathered through a two-part questionnaire designed by the researcher. The first part solicited demographic characteristics; the second asked specific questions about four factors contributing to effective clinical education: characteristics of clinical instructors, educational environment, educational planning, and characteristics of learners.

We received permission from the institution's educational deputy and department heads to distribute the questionnaire in internship places among students and instructors volunteering to participate at the end of internship hours the day they were gathered. Participants were asked not to consult each other while completing the questionnaires.

The Likert five-item scale was used to score each term: totally disagree = 0, disagree = 1, have no idea = 2, agree = 3, and totally agree = 4. Validity of the questionnaire's contents was evaluated from comments by experienced professors in clinical education. Its reliability was defined via the α -Cronbach method ($\alpha = 0.850$). The information gathered was analyzed through descriptive statistics (abundance, mean, etc.) and reasoning methods (statistical tests, etc.) using SPSS16 software.

4.4. Results

This sample population of 338 included 272 students (80.5%) and 66 instructors (19.5%). The average age for students was 22.5 ± 2.5 years and for instructors 43.4 ± 6.7 years. Among the sample, 130 students (47.8%) and 11 instructors (16.7%) were from nursing. By gender, 259 (95.2%) were female students and 61 (92.4%) were female instructors. Overall, 11.5% of students and 30.3% of instructors were married. Among instructors, 81.8% were from

scientific board of universities and averaged 13.4 ± 7.7 years of experience in education and 4.9 ± 5.9 years in clinical work.

Clinical instructors' characteristics

Respondents identified an interest in clinical education (instructors 93.9%, students 82.3%), necessary theoretical and practical qualifications (instructors 86.4%, students: 83.6%), and communication skills sufficient for constructive relationships with staff and patients (instructors 81.8%, students 77.5%) as the most important qualities of clinical instructors.

Factors in the educational environment important to clinical learning

Instructors and students mentioned access to patients in a variety of specialties (instructors 72.6%, students 78.3%), the ratio of patients and students (instructors 67.2%, students 76.5%), and coordination between instructors and ward staff (instructors 68.3%, students 88.6%) as factors in the educational environment that are most important in promoting effective learning.

Factors related to educational planning

A defined and clear evaluation system (instructors 62.1%, students 80.1%), appropriateness of theoretical and practical coursework (instructors 73.8%, students 84.4%), and holding clinical education workshops to enhance conceptual knowledge and practical skills (instructors 69.7%, students 80%) were cited as the most important factors in clinical education planning.

Learners' characteristics

Respondents named interaction between instructors and students (instructors 71.2%, students 87%), mutual respect between students and instructors (instructors 74.2%, students 91.4%), and having an interest in the field of study (instructors 58.5%, students 83.3%) as qualities that most influence clinical learning.

Table 1 presents the average score for all instructor and student responses to each factor surveyed. Except for "Instructors' characteristics," students' average score for each factor surveyed was higher than instructors' average score, indicating differences in their respective weightings of factors that enhance clinical education

Table 1: Comparison of instructors' and students' perspectives about factors influencing clinical education

| Factors contributing to quality of clinical education | | Average | Variance | P value** |
|---|------------|---------|----------|-----------|
| instructors' characteristics | Student | 67.3 | 6.3 | .894 |
| | Instructor | 67.5 | 5.1 | |
| | Total | 67.4 | 6.1 | |
| educational environment | Student | 71.9 | 6.5 | .000 |
| | Instructor | 67.3 | 6.8 | |
| | total | 71.0 | 6.8 | |
| educational planning | student | 65.6 | 5.8 | .000 |
| | Instructor | 60.7 | 7.2 | |
| | Total | 64.7 | 6.4 | |
| learners' characteristics | Student | 75.2 | 7.3 | .000 |
| | Instructor | 70.2 | 7.6 | |
| | Total | 74.2 | 7.6 | |
| Overall status | Student | 68.9 | 5.3 | .000 |
| | Instructor | 66.3 | 4.9 | |
| | Total | 68.4 | 5.3 | |

** Based on T-test

The average scores for students' and instructors' responses to questions involving different aspects of clinical education are compared in Table 1. The significance that instructors and students accord to clinical instructors' personal and professional characteristics shows a negligible and statistically insignificant difference (p -value = 0.894). However, there are significant differences between students' and instructors' scores regarding other factors relevant to clinical education. Most notable, students' average score for factors in the educational environment was 71.9 ± 6.5 , whereas for instructors it was 67.5 ± 5.1 . The difference is statistically significant and implies that students regard these factors as more important aspects of clinical education than do instructors.

Another notable difference between students' and instructors' emphasis appeared in response to questions about educational planning and learners' characteristics. Students place greater emphasis on these issues than their instructors do. The overall average score for students (68.9) and instructors (66.3) for these factors was statistically significant.

5.5. Discussion

Our study revealed that instructors and students consider issues related to effective clinical education as extremely important. Except for questions involving characteristics of clinical instructors, students accord more significance to each factor relevant to clinical education than their instructors do. However, the high scores of both groups indicate they understand which factors are significant for clinical education and can compare present circumstances with an ideal.

In a previous similar study, students and instructors allotted high scores to all factors included in this survey, including personal characteristics of learners and instructors, the clinical environment, educational planning, and clinical evaluation. Those results support findings from this research, except there was no significant difference between students' and instructors' in different fields (Hassan Zahraei et al, 2008). Another study disclosed a significant difference between instructors' and students' opinions about the educational conditions of their facility (Siavash vahabi et al, 2011). Students and instructors apparently realized what factors support effective clinical education, but their evaluations of their own educational environment differ.

Clinical instructors have many responsibilities, including the professional and mental security of students, providing nursing and midwife care to patients, and cooperating with staff (Masudi et al, 1996). In one previous study, students emphasized the role of instructors in developing a congenial and healthy working environment. They believed instructors play an effective and constructive role by offering new information, generally supporting students, and controlling their performance (Alavi&Abedi, 2007). This study has shown that instructors and students disapproved or totally disapproved of close and intimate relationships between instructors and students, a finding consistent with previously cited research (Ziber&Hagen, 2009).

In a previous review study, the characteristics of an effective clinical instructor were mentioned as: (1) having up-to-date knowledge, (2) clinical qualifications in education, (3) expertise in clinical education, (4) sophistication in interpersonal communications, and (5) having personal characteristics such as enthusiasm and seriousness toward the job, a sense of humor, unconditionally accepting mistakes and shortcomings, patience, and flexibility working with students in the clinical environment (Mollahadi, 2010). The most important qualities distinguishing effective from ineffective instructors were their interpersonal relationships and their personal characteristics (Gaberson& Oermann, 2007). Those findings coincide with findings by this study, in which students and instructors placed great emphasis on clinical instructors' personal characteristics.

This research identified elements in the educational environment that students and instructors regard as important for effective clinical education. The clinical environment is inherently stressful because it requires students to deal with situations which have not arisen in their previous learning (Gaberson& Oermann, 2007). The multitude of factors within the clinical environment is wide, and paying attention to its dimensions, including equipment, patients, and staff, takes special effort. Some previous research has indicated that all clinical positions are not able to create a positive learning environment for students (Hassan Zahraei et al, 2008). This study showed that students and instructors award high scores to all aspects related to an effective clinical environment. As respondents they were familiar with this item and were able to evaluate conditions of their clinical environment.

Educational planning entails putting principles into effect, including flexibility (response to local needs), integration (having multiple knowledge sources), application (ensuring knowledge is transmitted), document centrism (certifying educational and clinical contents), and collective learning with other health-related

careers(Gerard,2002).These findings agree with those of the present study. In this study, students and instructors rated factors related to learners' characteristics more highly than other factors. A similar study identified students' interest, self-confidence, and personal motivation as qualities essential to effective clinical learning (Hassan Zahraei et al,2008). Those findings also agree with findings by this study. Students' interest in the specialty they study along with instructors' interest in education, their talent, and their professional reputations are among factors that motivate students' learning (Amini et al,2002).

6.6. Conclusion

Except for items concerning qualities of instructors, students participating in this study placed greater weight than their instructors on all factors relevant to clinical education surveyed in our questionnaire. Nonetheless, students and instructors uniformly agreed that the four factors addressed in our survey were significant for clinical education. By considering these factors, it is possible evaluate the educational environment more thoroughly. In addition, our findings suggest it is essential to employ trained and experienced instructors who are interested in clinical education. Further, meaningful educational planning and regard for the personal characteristics of learners are equally essential for providing effective clinical education in nursing and midwifery.

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